REMARKS

Claims 1-20 are all the claims presently pending in the application. Claims 17-20 have been added to claim additional features of the invention.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1-4 and 9-12 are allowed. Applicant gratefully acknowledges that claims 6-8 and 13-16 would be allowable if rewritten in independent form. However, Applicant respectfully submits that all of the claims are allowable, once the terminology is recognized in accordance an interpretation agreeable to a person having ordinary skill in the art.

Claim 5 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Johnson, et al. (U.S. Patent No. 6,844,854 B2).

This rejection is respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

As described in the disclosure and defined by, for example, claim 5, the claimed invention is directed to an antenna device of transmission line type comprising two antenna elements opposed to each other. A signal is fed between the two antenna elements and the two antenna elements are spaced apart from each other by a distance smaller than the wavelength of the fed signal.

As explained at lines 6-14 on page 2, conventional transmission line type antenna devices have low radiation resistance so that a feed current is required to be several to several

tens of times larger than in an ordinary antenna to obtain the same radiation power. This low radiation resistance provides a large quality factor of the antenna and a narrow frequency band for impedance matching.

The claimed invention, on the other hand, provides a transmission line type antenna device having a broad frequency band and is easily matched.

II. THE PRIOR ART REJECTION

The Examiner alleges that Johnson teaches the claimed invention defined by claim 5. Applicant submits, however, that there are elements of the claimed invention which are neither taught nor suggested by Johnson.

As explained in the Abstract, Johnson discloses an interferometric antenna array for use with a wireless communication device in reducing electromagnetic energy in a region proximate to the antenna array. The Examiner points to Figures 2 and 5 and claim 6 of Johnson and alleges that the invention defined by claim 5 is thereby anticipated.

However, Applicant submits that the evaluation currently of record has failed to provide patentable weight to the description of the present invention that the antenna device is a transmission line type. This terminology "antenna of transmission line type" is a term of art that cannot simply be ignored in the prior art evaluation.

That is, an antenna of transmission line type is an antenna for which a signal is fed between two parallel lines emerged by an actual line and a mirror-image line, such as described in lines 10-18 of page 1. In contrast, a dipole antenna is an antenna for which a signal is fed between two antenna elements arranged in a straight line, such as shown in Figure 5, or as is well known in the art. A monopole antenna is derived from a dipole antenna and is an antenna for which a signal is fed between an antenna element and a case ground, as is well known in the art.

From the above viewpoint, the antenna device of the present invention differs from two parallel dipole antennas of the prior art, and the "power splitting" means that splits a signal is not necessary.

Applicant further submits that one of ordinary skill in the art would not agree that the "interferometric antenna array", as described at lines 11-15 of column 4 in the Johnson reference itself as being "*Two radiating dipole elements 6,8, ... adapted for use with the wireless device 4 ....*", satisfies the above-recited characterization as being a transmission line type antenna.

Hence, turning to the clear language of the claims, in Johnson there is no teaching or suggestion of: "An antenna device of transmission line type ....", as required by claim 5.

Therefore, Applicant submits that there are elements of the claimed invention that are not taught or suggested by Johnson, and the Examiner is respectfully requested to reconsider and withdraw this rejection.

III. FORMAL MATTERS AND CONCLUSION

Applicant includes a revision to the wording of the second paragraph on page 2, the final sentence in the Description of the Related Art section for clarification. No new matter is added, since the technical basis for this revision is found in the description at lines 59 - 61 of column 6 and line 30 of column 21 of US Patent 6,369,603 to Johnston et al.

In view of the foregoing, Applicant submits that claims 1-20, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance,

the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: 8/18/05

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